# U.S. DEPARTMENT OF ENERGY
# FLEET ALTERNATIVE FUELED VEHICLE ACQUISITION REPORT
# FOR FISCAL YEAR 2003

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# Contents



# Exhibits

# U.S. Department of Energy Fleet Alternative Fueled Vehicle Acquisition Report

## Executive Summary{ TC \l1 "Executive Summary}

This report is the Department of Energy's (DOE or Department) fifth annual report on the Department's performance in meeting the alternative fueled vehicle (AFV) acquisition and other requirements of the Energy Policy Act of 1992 (EPAct) and Executive Order 13149 (E.O. 13149). The report was developed in accordance with EPAct (42 U.S.C. 13211-13219), as amended by the Energy Conservation Reauthorization Act of l998 (Public Law 105-388), and in accordance with E.O. 13149, signed April 2000.

EPAct requires that in fiscal year (FY) 1999 and beyond, 75 percent of all covered vehicle acquisitions by Federal agencies be AFVs. E.O. 13149 sets a goal for covered Federal agencies to reduce petroleum consumption by 20 percent by FY 2005 (in comparison to a FY 1999 baseline), requires agencies to increase alternative fuel use in AFVs and calls for agencies to increase the fuel economy of light-duty vehicle (non-AFV) acquisitions. **Exhibit 1** summarizes the requirements and the Department's performance in meeting these requirements.

| Authority/Mandate | Performance Measure | Goal/Requirement | DOE Performance in FY 2003 |
|---|---|---|---|
| **EPAct** | AFV acquisitions | 75% of the 620 covered light-duty vehicles acquired in FY 2003 (i.e., 465 vehicles) must be AFVs | Acquired 498 AFVs, and earned 152 additional credits[1]. Achieved 650 credits total, representing 105% of covered acquisitions and 140% compliance with the 75% requirement |
| **E.O. 13149** | Petroleum consumption | By FY 2005, reduce consumption by 20% compared to FY 1999 baseline of 6,837,150 GGE[2] | Consumed 6,517,056 GGE, a decrease of 4.7% from the baseline |
| | Alternative fuel use in AFVs | By FY 2005, increase alternative fuel use in AFVs to a majority (>50%) of the total fuel used in those vehicles | Achieved 30% alternative fuel use in AFVs |
| | Fuel economy of light-duty acquisitions | By FY 2002, increase fuel economy by 1 mpg[3] and by FY 2005, increase by 3 mpg, compared to FY 1999 baseline of 17 mpg | Increased to 20 mpg, an increase of 3 mpg over the baseline |

[1] Credits earned for acquisition of dedicated light-, medium-, and heavy-duty AFVs and zero emission vehicles, and for biodiesel fuel use.
[2] Gasoline gallon equivalent (GGE)
[3] Miles per gallon (mpg)

**Exhibit 1. DOE's Performance in Meeting EPAct and E.O. 13149 Requirements, FY 2003**

In FY 2003, the Department acquired 498 AFVs and earned 152 extra credits (118 for using biodiesel fuel and 34 for acquiring dedicated AFVs) for a total of 650 EPAct credits. Agencies can exceed EPAct requirements significantly by earning extra EPAct credits and by acquiring AFVs in geographically exempt areas. DOE earned 140 percent of the required credits, equivalent to 105 percent of covered acquisitions. Each year since reporting began in FY 1999, DOE has exceeded the agency's EPAct requirement.

Toward the E.O. 13149 petroleum reduction goal, the Department's fleet consumed 6 percent less petroleum in FY 2003 than in the FY 1999 baseline year. Light-duty (conventional) vehicles acquired by the Department in FY 2003 have an average DOE/EPA[1] fuel economy rating of 20 miles per gallon, 3 miles per gallon above the Department's acquisitions in the FY 1999 baseline year. As such, the Department has already met the FY 2005 fuel economy objective of E.O. 13149. Departmental AFVs used alternative fuels to meet 30 percent of those vehicles' FY 2003 fuel requirements. Measures to expand alternative fuel infrastructure funded in FY 2003 should continue to reduce the Department's petroleum consumption, as greater access to alternative fuels is made available to fleets. These and other measures are outlined in the *U.S. Department of Energy's Compliance Strategy for Executive Order 13149*, published in June 2001.

In recognition of the effort needed to approach the 20 percent petroleum reduction goal of E.O. 13149, on March 8, 2004 a Secretarial Directive was issued to the Departmental Elements to take specific additional action to reduce petroleum consumption in the agency's fleet. This action demonstrates DOE's commitment to E.O. 13149, and these efforts will be critical to DOE's performance in achieving the goal.

[1] U.S. Environmental Protection Agency (EPA)

**Legislative and Executive Order Requirements**

Section 303 of EPAct (42 U.S.C. 13212) requires that 75 percent of all covered light-duty vehicles acquired by Federal fleets in FY 1999 and thereafter be AFVs. The EPAct requirements apply to agency fleets of 20 or more light-duty vehicles (vehicles less than or equal to 8,500 pounds gross vehicle weight rating) that are "centrally fueled or capable of being centrally fueled" and are primarily operated in Metropolitan Statistical Areas (MSAs) or Consolidated Metropolitan Statistical Areas (CMSAs) with populations of more than 250,000 according to1980 census data. Certain emergency, law enforcement, and national defense vehicles are exempt from these requirements.

E.O. 13149 requires each Federal agency that operates 20 or more vehicles within the United States to reduce its annual petroleum consumption by at least 20 percent by FY 2005, compared to FY 1999 consumption levels. Fleets may achieve the reductions through a combination of AFV acquisitions, increased alternative fuel use in AFVs, improved efficiency of non-AFV acquisitions, reductions in fleet sizes and vehicle miles traveled, and improvements in overall fleet operating efficiencies.

E.O. 13149 also includes two additional requirements in relation to the 20 percent petroleum reduction goal. First, agencies must use alternative fuels in their AFVs to meet a majority (i.e., at least 51 percent) of the fuel requirements of those vehicles by FY 2005. Second, agencies must increase the DOE/EPA average fuel economy rating of covered light-duty (non-AFV) vehicle acquisitions by 1 mile per gallon (mpg) by FY 2002 and 3 mpg by FY 2005, compared to the FY 1999 baseline.

The Energy Conservation Reauthorization Act of l998 amended EPAct to allow one AFV acquisition credit for every 450 gallons of pure biodiesel fuel or 2,250 gallons of B20, a blend of 20 percent biodiesel with 80 percent petroleum diesel, consumed in vehicles of over 8,500 pounds gross vehicle weight rating. These "biodiesel credits" may fulfill up to 50 percent of a Federal fleet's EPAct acquisition requirements.

Moreover, E.O. 13149 provides incentives for agencies to acquire and use dedicated AFVs. Agencies receive one additional AFV credit for each zero emission or dedicated light-duty vehicle, three credits for each dedicated medium-duty vehicle, and four credits for each dedicated heavy-duty vehicle. Agencies also can receive one credit for every 450 gallons of pure biodiesel used in diesel vehicles.

Section 310(b) of EPAct requires the head of each Federal agency to prepare and submit an annual report to Congress outlining the agency's AFV acquisitions and its future acquisition plans, beginning in FY 1999. Federal agencies, including DOE, must submit compliance data using the web-based Federal Automotive Statistical Tool. Data submitted by the Department are included in this report as Attachments A, B, and C.

## DOE's Approach to Compliance with EPAct and E.O. 13149{ TC \l1 "DOE's Approach to Compliance with EPAct and E.O. 13149}

To fulfill the requirements of E.O. 13149, the Department is in the process of implementing its *Compliance Strategy for Executive Order 13149,* a detailed five-year plan. It was developed based on fleet data available in FYs 1999 and 2000 and interviews with fleet managers at sixteen of the largest DOE sites. These sites account for more than 90 percent of the Department's petroleum consumption. The *Strategy* specifies that DOE will meet its annual EPAct acquisition requirements by acquiring 75 percent of its new light-duty vehicle acquisitions as AFVs. The *Strategy* also lays out a site-specific plan for the DOE fleets to meet the 20 percent petroleum consumption reduction goal by FY 2005, as required by the E.O.

To ensure compliance with the requirements of EPAct, DOE implemented the Fleet Surcharge Program in FY 2001, to help offset the incremental costs of AFVs. The incremental cost of an AFV ranges from zero to several thousand dollars, depending on the AFV type. The Fleet Surcharge Program places a small surcharge on each Departmental fleet vehicle leased from the General Services Administration (GSA), which includes the majority of the vehicles operated by DOE fleets. The funds from this program are placed in a separate account used to pay for the incremental costs of AFVs acquired by the Department each year. This program has played a critical role in the Department's success in exceeding the AFV acquisition requirements of EPAct.

The *Strategy* also states that the Department will use alternative fuels in its AFVs 75 percent of the time, surpassing the E.O. 13149 minimum requirement of a *majority* of total fuel used (i.e., at least 51 percent). In addition, DOE acquires light-duty vehicles with higher fuel economies, as required by E.O. 13149. The Department also will continue to earn biodiesel credits by using biodiesel fuel in all fleet diesel vehicles of over 8,500 pounds gross vehicle weight rating at several of the Department's larger facilities.

## DOE's FY 2003 Fleet Compliance with EPAct

**Exhibit 2** depicts AFV acquisitions by Department fleets in FY 1999 through FY 2003, and planned and projected acquisitions for FYs 2004 and 2005. Attachment A provides detailed information on the number and types of light-duty vehicles acquired by the Department in FY 2003. Attachments B and C show planned and projected acquisitions for FYs 2004 and 2005, respectively.

The Department has exceeded its EPAct requirements each year reported, and projects that it will continue to do so in the coming years. To increase efficiency, DOE established an internal goal to reduce its fleet size by 8 percent by the end of the 2003 calendar year in comparison to a base year of 2001. The total DOE fleet (including light-, medium-, and heavy-duty vehicles) was actually reduced by 8.7 percent, as of December 31, 2003, surpassing this goal. Despite the fact that DOE acquired fewer vehicles than in previous years, it still maintained a very high EPAct compliance rate in FY 2003.

It should be noted that many of the DOE-owned fleets are operated and maintained by DOE contractors. These contractors must comply with applicable Departmental goals and requirements, including E.O. 13149 as explicitly stated in a rulemaking published in *Federal*

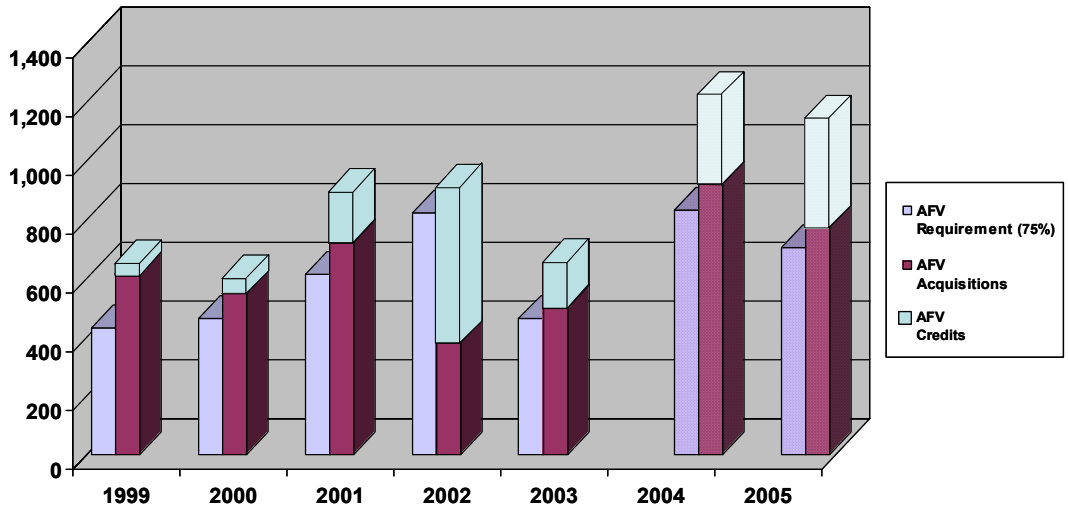


**Exhibit 2. Summary of DOE's Recent, Planned, and Projected AFV Acquisitions (Includes credits for dedicated AFVs and biodiesel use)**

*Register* notice (68 FR 52129) entitled "Acquisition Regulations: Motor Vehicle Fleet Fuel Efficiency" on September 2, 2003.

As summarized in **Exhibit 3**, in FY 2003, the Department acquired 498 AFVs and earned 152 additional AFV acquisition credits by acquiring dedicated AFVs and by using biodiesel fuel, for a total of 650 AFV credits. These credits equate to 105 percent of the total covered acquisitions (620) under EPAct and 140 percent compliance with the 75 percent acquisition requirement (465). As in FYs 2002, 2001, 2000, and 1999, the Department exceeded its EPAct requirement by a significant margin.

| | |
|---|---|
| EPAct-covered vehicle acquisitions | 620 |
| EPAct credits required for 75% compliance | 465 |
| AFVs acquired | 498 |
| Additional credits earned | 152 |
| Total AFVs and credits | 650 |

**Exhibit 3. DOE's Performance in Meeting EPAct Requirements, FY 2003**

**Exhibit 4** provides a breakdown, by fuel type, of the AFVs in the Department's fleets. Most of the AFVs acquired in FY 2003, and in the Department's inventory, are flex-fuel vehicles

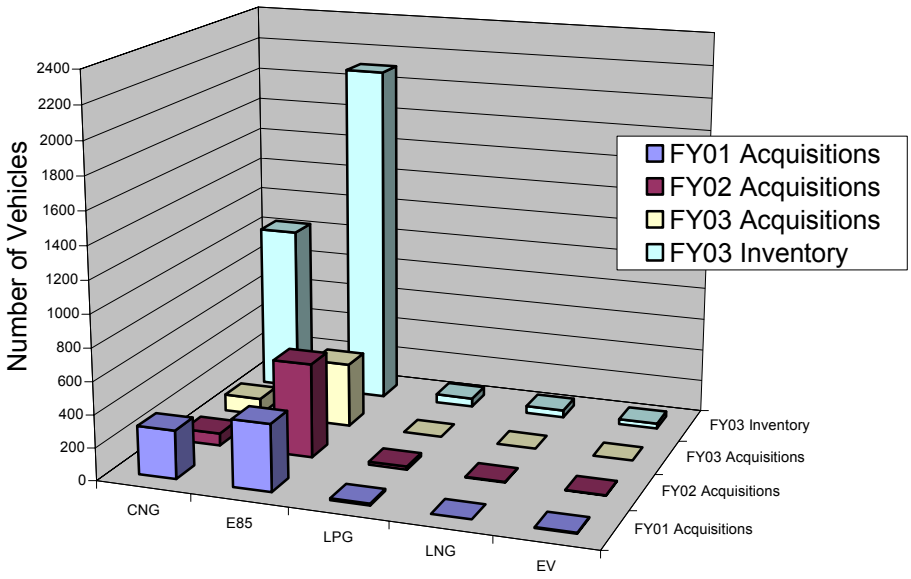


**Exhibit 4. DOE's AFV Acquisitions by Fuel Type**

designed to be operated on a mixture of 85 percent ethanol with 15 percent gasoline (E85), and dedicated and bi-fuel compressed natural gas (CNG) vehicles. Since the flex-fuel and bi-fuel vehicles are capable of operating on gasoline as well as the alternative fuel, special efforts are needed to ensure that these vehicles operate on the alternative fuel to the maximum extent possible.

Of the total 746 light-duty vehicles acquired in FY 2003, 126 vehicles were considered exempt from compliance with EPAct, as shown in **Exhibit 5**. Most of these are vehicles that are in fleets located in or operated outside a covered MSA or CMSA.

| Exemption | Number of Exempt Vehicles Acquired | Percentage of Total LDVs Acquired |
|---|---|---|
| Fleet Size | 1 | -- |
| Geographic | 36 | -- |
| Law Enforcement | 44 | -- |
| Non-MSA Operation (fleet) | 37 | -- |
| Non-MSA Operation (vehicles) | 8 | -- |
| Total Exemptions | 126 | 17 |
| Total LDV Covered Acquisitions | 620 | 83 |
| Total LDV Acquisitions | 746 | 100 |

**Exhibit 5. DOE's Exempt-Vehicle Acquisitions, FY 2003**

## DOE's FY 2003 Fleet Compliance with E.O. 13149

**Exhibit 6** summarizes DOE's performance toward meeting the goal of E.O. 13149, which is for Federal fleets to reduce petroleum consumption by 20 percent by FY 2005, in comparison to a FY 1999 baseline. In FY 2003, the Department consumed six percent less petroleum fuel than in 1999.

E.O. 13149 includes two required approaches to achieving the petroleum reduction goal. The first is that Federal fleets are required to use alternative fuels in their AFVs to meet a majority of the fuel requirements of those vehicles by the end of FY 2005. DOE's fleets used alternative fuels to meet 30 percent of the fuel requirements of its AFVs in FY 2003, which is a significant gain toward the goal of 50 percent set by E.O. 13149. As stated in the *Strategy*, the Department has declared an internal goal of 75 percent, which DOE hopes to achieve by the end of FY 2005.

The second required approach in E.O. 13149 calls for agency fleets to increase the fuel economy of light-duty vehicle acquisitions by 3 mpg by FY 2005, compared to FY 1999 acquisitions. The fuel economy of conventional light-duty vehicles acquired by the Department in FY 2003 was 3 mpg higher than in the covered vehicles acquired in the FY 1999 baseline year. Thus, the Department has already met the goal of E.O. 13149 and, as stated in the *Strategy*, the Department plans to continue to meet the 3-mpg improvement through 2005.

| Petroleum Consumption | | Alternative Fuel Use in AFVs | | Fuel Economy of Light-Duty Acquisitions | |
|---|---|---|---|---|---|
| **FY 1999 Baseline** | 6,837,150 GGE | | | **FY 1999 Baseline** | 17 mpg |
| **FY 2003** | 6,428,466 GGE | FY2003 | 30% | **FY 2003** | 20 mpg |
| **Change '99 – '03** | -6% | | | **Change '99 – '03** | +3 mpg |
| **FY2005 Goal** | -20% | FY2005 Goal | 75%+ | **FY2005 Goal** | +3 mpg |

**Exhibit 6. DOE's Performance in Meeting E.O. 13149 Requirements, FY 2003**

**Exhibit 7** summarizes the Department's fuel use in vehicles covered by E.O. 13149 from FY 1999 through FY 2003. In FY 2003, the Department consumed over 432,000 GGE of alternative fuels, thereby reducing gasoline and diesel fuel consumption in Department vehicles.

The majority of vehicles acquired by the Department are leased from GSA, and the leasing contract folds in the maintenance and fuel costs for the vehicles. As part of this program, GSA issues a credit card to fleets to purchase alternative and conventional fuels. Unfortunately, product code standards are not uniform among suppliers of alternative fuels, and it is not always possible for credit vendors to accurately track the alternative fuels purchased with the credit card. The exception is natural gas, which is usually purchased at a local utility refueling site that allows for more accurate accounting.

The drop in alternative fuel consumption in Department vehicles in FY 2003 is in part due to better estimation of alternative fuel use by GSA. GSA estimates fuel consumption in AFVs and conventional leased vehicles on an annual basis, and in FY 2003, GSA modified the way in which it estimates fuel use in AFVs. As a result, GSA determined that less of the fuel used in bi- and flex-fuel AFVs was alternative fuel and the FY 2003 numbers reflect the modified estimates.

As a result, the numbers reported for FY 2003 are considered to be better estimates than those reported in earlier years.

| Fuel Type | FY 1999 Quantity (GGE) | FY 2000 Quantity (GGE) | FY 2001 Quantity (GGE) | FY 2002 Quantity (GGE) | FY 2003 Quantity (GGE) |
|---|---|---|---|---|---|
| Biodiesel-B100 | 116 | 0 | 80,071 | 94,166 | 57,750 |
| CNG | 3,876 | 15,112 | 51,786 | 83,008 | 89,545 |
| E85 | 996 | 61,128 | 120,047 | 341,293 | 258,530 |
| Electricity | 0 | 495 | 11,672 | 5,959 | 1,770 |
| Liquefied Natural Gas (LNG) | 0 | 0 | 34,103 | 27,315 | 17,739 |
| Methanol | 167 | 0 | 0 | 0 | 0 |
| Propane | 25,010 | 0 | 482 | 9,713 | 7,196 |
| Total Alt Fuel Use | 30,165 | 76,735 | 298,161 | 561,454 | 432,530 |
| Diesel* | 1,521,598 | 1,781,178 | 1,978,712 | 1,421,081 | 1,456,425 |
| Gasoline | 3,033,221 | 3,919,972 | 4,958,948 | 5,335,519 | 4,972,041 |
| Total Petroleum Fuel Use | 4,554,819 | 5,701,150 | 6,937,660 | 6,756,660 | 6,428,466 |
| Total Fleet Fuel Use | 4,584,984 | 5,777,885 | 7,235,821 | 7,318,054 | 6,860,996 |
| % Alt Fuel Use Relative to Total Fuel Use | 0.7 | 1.3 | 4.1 | 7.7 | 6.3 |

*Includes diesel component of B20

**Exhibit 7. DOE's Fuel Use in FY 1999 through FY 2003**

## Success Stories{ TC \l1 "Success Stories}

Several of the Department's fleets have demonstrated a strong commitment to acquiring and using AFVs and reducing petroleum consumption, and these achievements are summarized here.

***Savannah River Site.*** This facility is committed to converting its fleet, one of the Department's largest, to run on renewable fuels. It has replaced almost 600 gasoline-fueled vehicles with flex-fuel, ethanol vehicles, including 136 vehicles (98 percent of covered acquisitions) in FY 2003 alone, to achieve 131 percent EPAct compliance. To ensure adequate refueling infrastructure, two E85 stations were constructed on the site, and electronic card readers were programmed to ensure that flex-fuel vehicles are fueled only with E85. This commitment has resulted in the fleet replacing over 30 percent of its FY 2003 covered petroleum use with E85.

***Examples of other successful DOE facilities:***

- ***Nevada Test Site*** achieved 159 percent compliance with EPAct (121 percent of covered acquisitions) by acquiring 32 AFVs and earning 14 credits for biodiesel use. The facility also reduced its petroleum consumption through the use of compressed natural gas (CNG).

- ***Sandia National Laboratory*** acquired 20 AFVs and earned four additional EPAct credits even though all of the acquisitions were exempt from EPAct requirements. This site has been successful in using CNG and biodiesel to reduce petroleum consumption.

- ***National Renewable Energy Laboratory's*** small fleet has been extremely successful in transitioning to AFVs and in lowering petroleum consumption. Of its 49 vehicles, 31 (63 percent) are AFVs. NREL's reduction in petroleum consumption also has been impressive, with a 64 percent reduction in FY 2003 in comparison to the FY 1999 baseline.

- ***Examples of other smaller DOE fleets*** that exhibited excellent performance in FY 2003. **DOE-HQ** achieved 133 percent EPAct compliance through acquisition of dedicated AFVs for 86 percent of covered acquisitions; **NETL-PA** achieved 160 percent EPAct compliance through acquisition of AFVs for 133 percent of covered acquisitions; **Brookhaven** achieved 267 percent compliance (200 percent of covered acquisitions) through a combination of acquisitions and credits. Although exempt from EPAct requirements, **Pantex** acquired six AFVs and is the second highest consumer of E85 in the DOE fleet. **Oak Ridge Operations** also significantly exceeded EPAct requirements (267 percent compliance) by acquiring 8 AFVs, which is twice the number of EPAct-covered vehicles. Some fleets have exceeded the 75 percent EPAct acquisition requirement by acquiring AFVs in exempt geographic locations, and have received extra EPAct credits by acquiring dedicated light-, medium-, and heavy-duty AFVs, as allowed by E.O. 13149.

In support of Departmental petroleum reduction efforts, DOE allocated $2.7M in FY 2003

| DOE Facility | Fuel Infrastructure |
|---|---|
| National Energy Technology Laboratory – WV | 1 – E85<br>1 – CNG |
| National Energy Technology Laboratory – PA | 1 – E85<br>1 - CNG |
| Sandia National Laboratory | 1 – CNG<br>1 – B20 |
| Idaho National Engineering and Environmental Laboratory | 2 – CNG<br>1 – B20 |
| Oak Ridge National Laboratory | 2 – E85<br>1 – B20 |
| FERMILAB | 1 – E85 |
| Pantex Plant | 1 – E85 |
| Nevada Test Site | 2 – E85 |
| Los Alamos National Laboratory | 2 – E85<br>1 – B20 |
| Bonneville Power | 2 – E85 |
| Lawrence Livermore National Laboratory | 2 – E85<br>1 – B20 |
| Richland | 1 – E85 |

**Exhibit 8. FY 2003 DOE Fleet Infrastructure Projects**

toward developing 25 alternative fuel infrastructure projects at twelve of the Department's facilities. The projects involve the construction of refueling stations and storage tanks for fifteen E85, five CNG, and five biodiesel sites.

In addition, the Department is conducting further analyses of its fleets to determine other methods for encouraging alternative fuel use and decreasing petroleum consumption. **Exhibit 8** summarizes these installations.

**DOE's Projected Fleet AFV Acquisitions for Fiscal Years 2004 and 2005{ TC \l1 "DOE's Projected Fleet AFV Acquisitions for Fiscal Years 2004 and 2005}**

While Attachment A provides detailed information on AFVs actually acquired by the Department in FY 2003, Attachment B provides planned vehicle acquisitions for the Department fleets in FY 2004, and Attachment C projects the number of vehicle acquisitions that the Department will make for its fleets in FY 2005.

As shown in Attachment B, in FY 2004, Department fleets are planning to acquire a cumulative total of 1,460 light-duty vehicles. Of these, 1,111 are anticipated to be EPAct-covered acquisitions. If DOE acquires this number of covered vehicles, then to meet the 75 percent EPAct requirement, it will need to generate a minimum of 833 AFV credits. For FY 2004, the Department has submitted plans to acquire 920 AFVs, which would earn a total of 955 EPAct credits because of planned acquisition of dedicated CNG vehicles. The Department also plans to use more biodiesel than was used by its fleets in FY 2003 and in total generate an additional 270 credits, thereby earning a total of 1,225 acquisition credits for FY 2004. Thus, the Department plans to acquire 110 percent of its new covered light-duty vehicles as AFVs and AFV credits in FY 2004, representing 47 percent more than is required by EPAct.

In FY 2005, Department fleets are projecting they will acquire 1,148 light-duty vehicles. Of these, 943 are anticipated to be EPAct-covered acquisitions, thus establishing a 707 minimum credit requirement in order to meet EPAct's 75 percent requirement. The Department projects it will acquire 770 AFVs (792 including the associated EPAct credits) and use more biodiesel fuel in FY 2005 than in FY 2004, thereby earning 1,146 credits. Thus, the Department plans to exceed its EPAct requirement again in FY 2005 by acquiring 122 percent of its new covered light-duty vehicles as AFVs and AFV credits, 63 percent more than EPAct requires.

**Summary and Conclusions**

This report and its attachments demonstrate that the Department exceeded its AFV acquisition requirements under EPAct in FY 2003. It also indicates that the Department expects to repeat this accomplishment in FYs 2004 and 2005.

In FY 2003, DOE reduced covered petroleum consumption by 6 percent, as compared to FY 1999. It achieved, two years early, the E.O. 13149 goal of increasing by 3 mpg the average fuel economy for newly acquired light-duty conventional vehicles. DOE also used alternative fuels in

AFVs 30 percent of the time, a significant increase and a significant advance toward the 50 percent goal set by E.O. 13149.

Recognizing the challenges that the Department faces in meeting the 20 percent petroleum reduction goal of E.O. 13149, on March 8, 2004, Deputy Secretary Kyle McSlarrow directed all DOE Elements to implement measures, beyond those outlined in the *Strategy,* to reduce vehicular petroleum consumption. These additional measures, such as increasing the alternative fuel use beyond 75 percent, accelerating the replacement of conventional vehicles with AFVs, acquiring hybrid and fuel efficient vehicles for fleets not covered by EPAct, and other similar actions, will be critical to DOE's success in meeting the 20 percent petroleum use reduction goal of E.O. 13149.

# Attachments

## Attachment A: Actual Department of Energy FY 2003 Vehicle Acquisitions

### Actual FY 2003 Light-Duty Vehicle Acquisitions

| | | Leased | Purchased | Total | Total Vehicle Inventory |
|---|---|---|---|---|---|
| Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions | | 672 | 74 | 746 | 8,959 |
| Exemptions | Fleet Size | 1 | 0 | 1 | 18 |
| | Geographic | 24 | 12 | 36 | 655 |
| | Law Enforcement | 37 | 7 | 44 | 393 |
| | Non-MSA Operation (fleet) | 33 | 4 | 37 | 965 |
| | Non-MSA Operation (vehicles) | | | 8 | |
| **EPACT Covered Acquisitions** | | **577** | **51** | **620** | **6,928** |

### Actual FY 2003 AFV Acquisitions

| Vehicle | | Leased | Purchased | Total | Total Vehicle Inventory |
|---|---|---|---|---|---|
| Sedan | CNG Bi-Fuel Subcompact | 0 | 0 | 0 | 88 |
| Sedan | CNG Dedicated Subcompact | 1 | 0 | 1 | 5 |
| Sedan | Electric Dedicated Subcompact | 0 | 0 | 0 | 5 |
| Sedan | CNG Bi-Fuel Compact | 0 | 0 | 0 | 157 |
| Sedan | E85 Flex-Fuel Compact | 71 | 0 | 71 | 112 |
| Sedan | CNG Bi-Fuel Midsize | 0 | 0 | 0 | 4 |
| Sedan | E85 Flex-Fuel Midsize | 27 | 2 | 29 | 335 |
| Sedan | CNG Dedicated Large | 3 | 1 | 4 | 3 |
| Pickup 4x2 | CNG Bi-Fuel | 59 | 0 | 59 | 377 |
| Pickup 4x2 | CNG Dedicated | 0 | 10 | 10 | 33 |
| Pickup 4x2 | E85 Flex-Fuel | 70 | 10 | 80 | 580 |
| Pickup 4x2 | Electric Dedicated | 0 | 0 | 0 | 25 |
| Pickup 4x2 | LNG Bi-Fuel | 0 | 0 | 0 | 33 |
| Pickup 4x2 | LPG Bi-Fuel | 0 | 0 | 0 | 29 |
| Pickup 4x4 | CNG Bi-Fuel | 1 | 0 | 1 | 138 |
| Pickup 4x4 | E85 Flex-Fuel | 51 | 0 | 51 | 43 |
| Pickup 4x4 | LNG Bi-Fuel | 0 | 0 | 0 | 1 |
| Pickup 4x4 | LPG Bi-Fuel | 1 | 0 | 1 | 23 |
| SUV 4x2 | CNG Bi-Fuel | 0 | 0 | 0 | 1 |
| SUV 4x2 | E85 Flex-Fuel | 3 | 0 | 3 | 19 |
| SUV 4x4 | CNG Bi-Fuel | 0 | 0 | 0 | 3 |
| SUV 4x4 | E85 Flex-Fuel | 79 | 7 | 86 | 234 |
| SUV 4x4 | LNG Bi-Fuel | 0 | 0 | 0 | 4 |
| Van 4x2 | CNG Bi-Fuel | 1 | 0 | 1 | 22 |
| Van 4x2 | CNG Dedicated | 0 | 9 | 9 | 49 |
| Van 4x2 | E85 Flex-Fuel | 71 | 3 | 74 | 783 |
| Bus | LNG Bi-Fuel | 0 | 0 | 0 | 7 |

| | | | | | |
|---|---|---|---|---|---|
| Pickup MD | CNG Bi-Fuel | 1 | 4 | 5 | 67 |
| Van MD | CNG Bi-Fuel | 6 | 2 | 8 | 67 |
| Van MD | CNG Dedicated | 2 | 0 | 2 | 17 |
| Emergency & Special Purpose MD 8,501-16,000 GVWR | CNG Dedicated | 0 | 3 | 3 | 0 |
| Emergency & Special Purpose HD 16,001 + GVWR | LPG Bi-Fuel | 0 | 0 | 0 | 1 |
| **Total Number of AFV Acquisitions** | | **447** | **51** | **498** | **3,265** |
| Zero Emission Vehicle Credits | | 0 | 0 | 0 | |
| Dedicated Light-Duty AFV Credits | | 4 | 20 | 24 | |
| Dedicated Medium-Duty AFV Credits | | 4 | 6 | 10 | |
| Dedicated Heavy-Duty AFV Credits | | 0 | 0 | 0 | |
| Biodiesel Fuel Usage Credits – Actuals | | | | 118 | |
| **Total AFV Acquisitions with Credits** | | **455** | **77** | **650** | |
| **AFV Percentage of Covered Light-Duty Vehicle Acquisition** | | | | **105%** | |

## Attachment B: Planned Department of Energy FY 2004 Vehicle Acquisitions

### Planned FY 2004 Light-Duty Vehicle Acquisitions

| | | Leased | Purchased | Total |
|---|---|---|---|---|
| Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions | | 1227 | 233 | 1460 |
| Exemptions | Fleet Size | 4 | 0 | 4 |
| | Geographic | 51 | 6 | 57 |
| | Law Enforcement | 31 | 15 | 46 |
| | Non-MSA Operation (fleet) | 237 | 1 | 238 |
| | Non-MSA Operation (vehicles) | | | 4 |
| **EPACT Covered Acquisitions** | | **904** | **211** | **1111** |

### Planned FY 2004 AFV Acquisitions

| Vehicle | | Leased | Purchased | Total |
|---|---|---|---|---|
| Sedan | CNG Bi-Fuel Subcompact | 5 | 0 | 5 |
| Sedan | CNG Dedicated Subcompact | 1 | 0 | 1 |
| Sedan | CNG Bi-Fuel Compact | 76 | 0 | 76 |
| Sedan | E85 Flex-Fuel Compact | 205 | 0 | 205 |
| Sedan | E85 Flex-Fuel Midsize | 23 | 4 | 27 |
| Sedan | CNG Dedicated Large | 1 | 0 | 1 |
| Pickup 4x2 | CNG Bi-Fuel | 29 | 0 | 29 |
| Pickup 4x2 | CNG Dedicated | 0 | 5 | 5 |
| Pickup 4x2 | E85 Flex-Fuel | 157 | 17 | 174 |
| Pickup 4x2 | LPG Bi-Fuel | 3 | 0 | 3 |
| Pickup 4x4 | CNG Bi-Fuel | 1 | 1 | 2 |
| Pickup 4x4 | E85 Flex-Fuel | 56 | 2 | 58 |
| Pickup 4x4 | LPG Bi-Fuel | 2 | 0 | 2 |
| SUV 4x2 | E85 Flex-Fuel | 1 | 0 | 1 |
| SUV 4x4 | E85 Flex-Fuel | 131 | 11 | 142 |
| Van 4x2 | CNG Dedicated | 20 | 8 | 28 |
| Van 4x2 | E85 Flex-Fuel | 86 | 6 | 92 |
| Pickup MD | CNG Bi-Fuel | 53 | 3 | 56 |
| Van MD | CNG Bi-Fuel | 9 | 4 | 13 |
| **Total Number of AFV Acquisitions** | | **859** | **61** | **920** |
| Zero Emission Vehicle Credits | | 0 | 0 | 0 |
| Dedicated Light-Duty AFV Credits | | 22 | 13 | 35 |
| Dedicated Medium-Duty AFV Credits | | 0 | 0 | 0 |
| Dedicated Heavy-Duty AFV Credits | | 0 | 0 | 0 |
| Biodiesel Fuel Usage Credits - Planned | | 0 | 0 | 270 |
| **Total AFV Acquisitions with Credits** | | **881** | **74** | **1225** |
| **AFV Percentage of Covered Light-Duty Vehicle Acquisition** | | | | **110%** |

## Attachment C: Projected Department of Energy FY 2005 Vehicle Acquisitions

### Projected FY 2005 Light-Duty Vehicle Acquisitions

| | | Leased | Purchased | Total |
|---|---|---|---|---|
| Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions | | 866 | 282 | 1148 |
| Exemptions | Fleet Size | 1 | 0 | 1 |
| | Geographic | 22 | 8 | 30 |
| | Law Enforcement | 26 | 22 | 48 |
| | Non-MSA Operation (fleet) | 125 | 0 | 125 |
| | Non-MSA Operation (vehicles) | | | 1 |
| **EPACT Covered Acquisitions** | | **692** | **252** | **943** |

### Projected FY 2005 AFV Acquisitions

| Vehicle | | Leased | Purchased | Total |
|---|---|---|---|---|
| Sedan | CNG Bi-Fuel Subcompact | 53 | 0 | 53 |
| Sedan | CNG Bi-Fuel Compact | 1 | 0 | 1 |
| Sedan | E85 Flex-Fuel Compact | 45 | 9 | 54 |
| Sedan | E85 Flex-Fuel Midsize | 110 | 9 | 119 |
| Sedan | CNG Dedicated Large | 3 | 0 | 3 |
| Pickup 4x2 | CNG Bi-Fuel | 11 | 0 | 11 |
| Pickup 4x2 | CNG Dedicated | 0 | 5 | 5 |
| Pickup 4x2 | E85 Flex-Fuel | 98 | 66 | 164 |
| Pickup 4x2 | LPG Bi-Fuel | 6 | 0 | 6 |
| Pickup 4x4 | CNG Bi-Fuel | 0 | 2 | 2 |
| Pickup 4x4 | E85 Flex-Fuel | 36 | 15 | 51 |
| SUV 4x2 | E85 Flex-Fuel | 2 | 5 | 7 |
| SUV 4x4 | E85 Flex-Fuel | 116 | 42 | 158 |
| Van 4x2 | CNG Dedicated | 2 | 10 | 12 |
| Van 4x2 | E85 Flex-Fuel | 51 | 31 | 82 |
| Van 4x2 | Electric Dedicated | 2 | 0 | 2 |
| Bus | LNG Bi-Fuel | 0 | 25 | 25 |
| Pickup MD | CNG Bi-Fuel | 11 | 2 | 13 |
| Van MD | CNG Bi-Fuel | 1 | 1 | 2 |
| **Total Number of AFV Acquisitions** | | **548** | **222** | **770** |
| Zero Emission Vehicle Credits | | 2 | 0 | 2 |
| Dedicated Light-Duty AFV Credits | | 5 | 15 | 20 |
| Dedicated Medium-Duty AFV Credits | | 0 | 0 | 0 |
| Dedicated Heavy-Duty AFV Credits | | 0 | 0 | 0 |
| Biodiesel Fuel Usage Credits - Projected | | 0 | 0 | 354 |
| **Total AFV Acquisitions with Credits** | | **555** | **237** | **1146** |
| **AFV Percentage of Covered Light-Duty Vehicle Acquisition** | | | | **122%** |

## Acronyms

| | |
|---|---|
| AFV | Alternative Fueled Vehicle |
| B20 | Biodiesel blended fuel that is 20 percent biodiesel with 80 percent petroleum diesel |
| CMSA | Consolidated Metropolitan Statistical Area |
| CNG | Compressed Natural Gas |
| DOE | U.S. Department of Energy |
| E85 | Ethanol-blended fuel that is at least 85 percent ethanol and 15 percent petroleum gasoline |
| EPA | U.S. Environmental Protection Agency |
| EPAct | Energy Policy Act of 1992, Public Law 102-486 |
| E.O. 13149 | Executive Order 13149, "Greening the Government through Federal Fleet and Transportation Efficiency," 65 FR 24607 |
| FAST | Federal Automotive Statistical Tool (the Federal fleet's Web-based data collection and reporting system, at http://fastweb.inel.gov) |
| FY | Fiscal year |
| GGE | Gasoline gallon equivalent |
| GSA | General Services Administration |
| GVWR | Gross vehicle weight rating |
| LDV | Light duty vehicle |
| LNG | Liquefied Natural Gas |
| MD | Medium duty |
| MPG | Miles per gallon |
| MSA | Metropolitan Statistical Area |
| NETL-PA | National Energy Technology Laboratory, Pittsburgh |